

REMARKS

Initially, Applicants respectfully acknowledge that the Examiner has indicated that claims 5, 6, 9 and 10, which are objected to, would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims.

Claims 1-11 are pending in the application.

Reconsideration of the rejections and allowance of the pending application in view of the foregoing amendments and following remarks are respectfully requested.

In the Office Action, claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Oh et al., U.S. Patent No. 6,152,710, and claims 7, 8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oh. These rejections are respectfully traversed.

Independent claim 1 has been amended to more clearly define a structural feature of an embodiment and to more clearly distinguish over the applied prior art reference by further reciting a suction valve fixing member engaged to a circumferential portion of a frontal surface of the piston to receive the suction valve for back and forth movement. No new matter is believed to be introduced by the present amendment. In this regard, the Examiner's attention is directed to, inter alia, Figs. 5 and 6 of Applicants' application.

It is a disclosed feature of an embodiment to provide a reciprocating compressor which has an improvement in compression performance by enhancing the structures of

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a suction valve for controlling gas suction and a discharge valve for controlling gas discharge.

To achieve the above-noted feature, a reciprocating compressor of the present embodiment, as recited in amended claim 1, includes, inter alia, a piston which reciprocates in a cylinder by receiving a driving force of a reciprocating motor and has a gas suction path therein, a suction valve mounted at an end surface of the piston to control flow of taken in gas through the suction path, and a valve assembly having a discharge cover engaged to one side of the cylinder, a discharge valve installed at an end portion of the cylinder to control gas discharge of a compression space formed by the cylinder and the piston, and a valve spring that elastically supports the discharge valve. The reciprocating compressor further includes a suction valve fixing member engaged to a circumferential portion of a frontal surface of the piston to receive the suction valve for back and forth movement.

Applicants respectfully submit that the reference relied upon in the rejections under 35U.S.C. 102(b) and 103(a) does not disclose such a combination of features.

With regard to the rejection of claims 1-10, Applicants submit that the suction valve fixing member 144 is engaged to a circumferential portion of a frontal surface of the piston, as recited in claim 1.

In comparison, the cock 64 of the Oh reference is engaged to a central portion of the frontal surface of the piston 60.

With regard to the rejection of claim 11, Applicants has amended claim 11 to further

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recite a round head rivet that fixes the suction valve to the piston, the round head rivet provided with a round head having a convex surface at each end thereof, and extending through an end portion of the piston, and an insertion groove having in a concave recess formed at the rear surface of the discharge valve to receive the round head rivet.

In detail, in the present embodiment, the round head rivet R fixing the suction valve 243 to the piston 242 includes a round head having a convex surface at each end thereof, is configured to extend through the end portion of the piston, and the insertion groove having a concave recess is formed at the rear surface of the discharge valve to receive the round head rivet, as shown in Figs. 10 and 11.

The combination of these features is not disclosed in the Oh reference. In comparison, the cock 64 of Oh has a head having a flat surface, and neither passes through the head portion of the piston nor has a head on the other end thereof.

Thus, Oh does not anticipate the present invention or render the presently claimed invention unpatentable.

Claims 5, 9 and 10 have been amended to be rewritten in independent form including all the limitations of the base claim and intervening claims.

Independent claims 1, 5 and 9-11 are now in condition for allowance in view of the amendments and the above-noted remarks, and claims 2-4, and 6-8 dependent thereon respectively are also submitted to be in condition for allowance in view of their dependence from the allowable base claims and also at least based upon their recitations of additional features of the present invention. It is respectfully requested,

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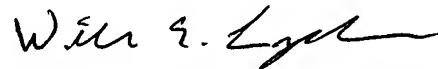
therefore, that the rejections under 35 U.S.C. 102(b) and 35 U.S.C. 103(a) be withdrawn and that an early indication of the allowance thereof be given.

Any amendments to the claims which have been made in this amendment, and which have not been specifically noted to overcome a rejection based on prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to be attached thereto.

Based on the above, it is respectfully submitted that this application is now in condition for allowance, and a Notice of Allowance is respectfully requested.

Should the Examiner have any questions or comments regarding this response, or the present application, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,  
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